

REMARKS

In response to the final office action dated June 17, 2009, Applicants have amended claims 1, 2-4, 6, 14-16, 22-24, 27, and 31, and cancelled claim 28. Claims 5, 7-13, 22, 23, 29, and 30 were previously withdrawn. Claims 1-4, 6, 14-21, 24-27, and 31 are presented for examination.

Claims 27 and 31 are rejected under 35 U.S.C. § 102(b) as anticipated by Richter, et al., DE 42 41 074 A1 ("Richter").

Amended independent claim 27 recites, among others, that a pressure controller is configured to deliver a propellant from a reservoir propellant chamber to a working propellant chamber to keep the working pressure within the working propellant chamber substantially constant. Amended independent claim 31 recites, among others, that a pressure controller delivers a propellant from a reservoir propellant chamber to a working propellant chamber to keep the working pressure within the working propellant chamber substantially constant.

Richter discloses a lubricant dispenser including a mechanism for dosed lubricant release.¹ See, e.g., page 1, lines 14-15. A dosing piston 3 is loaded by the pressure of a pressure gas, which gradually decreases as the lubricant is released from the dispenser such that the lubricant is released from the dispenser at a *precise* rate. See, e.g., page 1, lines 16-23; page 3, lines 9-12, 23-30, 38-41; page 4, lines 1-8. Further, Richter discloses a space located between a wall attached to a pressure gas inlet 7 and a dosing piston 3 (see page 4, lines 28-31), which is identified by the Examiner as a "working propellant chamber" (see the final office action, page 2, lines 9-10). However, Richter does not disclose keeping the pressure of this chamber substantially constant, as required by amended claims 27 and 31. Rather, the pressure in this chamber will ultimately decrease (along with the pressure in the pressure gas cartridge 4) as lubricant is released from the dispenser. See Richter, page 3, lines 38-41. Thus, amended claims 27 and 31 are not anticipated by Richter.

In the final office action, the Examiner asserts that "[t]he pressure in 4 will decrease, however, element 6 is a choke which is set at a much lower pressure therefore, even as the pressure in chamber 4 decreases the pressure in chamber 1 [described in Richter] is kept

¹ Citations to Richter are to the certified translation of DE 42 41 074 A1 submitted to the Office in the information disclosure statement dated June 9, 2006.

constant.” See page 3, lines 18-21. However, as correctly pointed out by the Examiner (*see* the final office action, page 2, line 9), chamber 1 described in Richter corresponds to the product chamber recited in amended claims 27 and 31, not the working propellant chamber recited in these two claims. Thus, even if the pressure in chamber 1 described in Richter is kept constant, Richter still does not disclose that the pressure in a working propellant chamber is kept substantially constant, as required by amended claims 27 and 31. Indeed, the working propellant chamber in Richter identified by the Examiner (i.e., the space between the wall attached to gas outlet 7 and the dosing piston 3) is in communication with chamber 4 through diffusion choke 6. *See, e.g.*, Richter, Figure 1 and page 2, lines 9-11. As a result, the pressure in the working propellant chamber in Richter would decrease along with the pressure in chamber 4 as the lubricant in chamber 1 is released from the dispenser and therefore would not stay substantially constant, as required by amended claims 27 and 31.

Further, amended claims 27 and 31 are not anticipated by Richter on an additional, independent ground. Specifically, amended claims 27 and 31 recite, among others, a pressure controller that includes a reference pressure chamber confining a gas at a reference pressure. The reference pressure determines the working pressure in the working propellant chamber. Richter does not disclose such a pressure controller. The Examiner asserts that Richter discloses “a pressure controller 5.” See the final office action, page 2, line 11. However, Richter explicitly describes that reference number 5 is a “pressure gas outlet.” See page 4, line 29. In other words, reference number 5 is not even a pressure controller, let alone a pressure controller including a reference pressure chamber, as required by amended claims 27 and 31. Thus, amended claims 27 and 31 are not anticipated by Richter on this additional, independent ground.

Accordingly, Applicants request reconsideration and withdrawal of this rejection. **As claim 31 is not subject to any other rejection, Applicants submit that this claim is now in condition for allowance.**

Claims 1-4, 6, 14-21, 24, 26, and 28 are rejected under 35 U.S.C. § 103(a) as unpatentable over Richter in view of Van’t Hoff, WO 99/62791 (“Van’t Hoff”).² Claim 25 is

² As Applicants have cancelled claim 28, the rejection of this claim is now moot.

rejected under 35 U.S.C. § 103(a) as unpatentable over Richter in view of Everett, U.S. Patent No. 3,140,802 ("Everett").

Independent claim 1 is discussed first. Amended claim 1 recites, among others, a pressure controller that includes a reference pressure chamber confining a gas at a reference pressure. The pressure controller is configured to supply the propellant from a high-pressure chamber to a working pressure chamber to keep the working pressure in the working pressure chamber substantially constant and the supply of the propellant to the working pressure chamber is determined based on the reference pressure.

As discussed above, Richter does not disclose a pressure controller including a reference pressure chamber or a pressure controller configured to supply the propellant from a high-pressure chamber to a working pressure chamber to keep the working pressure in the working pressure chamber substantially constant, as required by amended claim 1. Nor does Richter render such a pressure controller obvious.

Van't Hoff does not cure the deficiencies in Richter. First, it would not have been obvious to combine Van't Hoff with Richter. Van't Hoff describes a pressure control device for maintaining a constant predetermined pressure in a container. *See, e.g.*, the abstract. The pressure control device includes a first chamber, a second chamber, and a closing member movable relative to the second chamber for releasing and closing a fluid communication between the first chamber and the container. *Id.* The first chamber is filled with a gas that has a higher pressure than the pressure in the container and can supply the gas to the container through the fluid communication when the pressure in the container decreases. *Id.* It is not clear which chamber or container described in Van't Hoff is deemed by the Examiner as a working pressure chamber that has a substantially constant pressure. In any event, Richter describes a lubricant dispenser that releases the lubricant at a slow precise rate. The lubricant dispenser described in Richter does not maintain a substantially constant pressure in any working pressure chamber. Thus, one skilled in the art would have had no reason to modify the lubricant dispenser described in Richter by including a pressure controller to keep the working pressure in a working pressure chamber substantially constant, as required by claim 1, and therefore would not have had any reason to look to Van't Hoff as a basis for including a pressure controller.

It appears that the Examiner has simply picked two devices independently known in the art (i.e., a lubricant dispenser described in Richter and a pressure control device described in Van't Hoff) to render claim 1 obvious. Applicants would like to point out that, according to the Supreme Court, a patent claim "composed of several elements is **not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.**" *See KSR Intern. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742 (2007); emphasis added. Instead, "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *Id.* Here, the Examiner did not provide any explanation or reasoning as to why one skilled in the art would have included a pressure controller described in Van't Hoff in a lubricant dispenser described in Richter. In other words, it appears that the Examiner has improperly based his conclusion of obviousness on the mere assertion that the elements required by claim 1 are separately described in two independent references (i.e., Richter and Van't Hoff). Accordingly, Applicants submit that the Examiner has not met his burden under the law described by the Supreme Court.

Further, Richter states that "[t]he invention is based on the insight that a diffusion choke employed as described effects a lubricant release from the lubricant dispenser for long and very long periods of time, more specifically, such that throughout the service life the release of a small and also very small lubricant release rate can be ensured, and with a high accuracy." *See* page 2, lines 27-21; emphasis added. According to Richter, a diffusion choke contains pores that allows for diffusion of a gas from a place of a higher concentration (i.e., a high pressure chamber) to a place of a lower concentration (e.g., a low pressure chamber). *See* page 2, lines 9-26. It would not have been clear how a pressure controller described in Van't Hoff could achieve the results intended by Richter. Even if the pressure controller described in Van't Hoff could somehow have achieved the results intended by Richter (which Applicants do not concede), it would have been apparent to one skilled in the art that including such a pressure controller in the lubricant dispenser described in Richter would defeat the purpose of its diffusion choke, which is an essential feature of Richter's invention. According to MPEP 2143.01VI,

"The proposed modification cannot change the principle of operation of a reference. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious" (emphasis added). Here, because including a pressure controller described in Van't Hoff in a lubricant dispenser described in Richter would have completely changed the principle of operation of Richter's dispenser, one skilled in the art would not have combined Van't Hoff with Richter to provide the system recited in amended claim 1.

In addition, Evertt also does not cure the deficiencies in Richter. For example, similar to Richter, Everett does not disclose or render obvious a pressure controller including a reference pressure chamber or a pressure controller configured to supply the propellant from a high-pressure chamber to a working pressure chamber to keep the working pressure in the working pressure chamber substantially constant, as required by amended claim 1.

Thus, claim 1 is not obvious over Richter in view of Van't Hoff or Everett. Neither are claims 2-4, 6, 14-21, and 24-26, all of which depend from claim 1.

Accordingly, Applicants request reconsideration and withdrawal of these two rejections.

Applicants submit that the application is now in condition for allowance, an action of which is requested.

Any circumstance in which Applicants have: (a) addressed certain comments of the Examiner does not mean that Applicants concede other comments of the Examiner; (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for the patentability of those claims and other claims; or (c) amended or canceled a claim does not mean that Applicants concede any of the Examiner's positions with respect to that claim or other claims.

This document is filed concurrently with a Request for Continued Examination ("RCE"). The \$810.00 fee for the RCE is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization.

Applicant : Vanblaere et al.
Serial No. : 10/542,831
Filed : September 22, 2005
Page : 13 of 13

Attorney's Docket No.: 17042-0006US1 / CMJ/MBX
P67265US00

Please apply any other charges to deposit account 06-1050, referencing Attorney's
Docket No. 17042-0006US1.

Respectfully submitted,

Date: September 15, 2009

/Tony Zhang/
Tony Zhang, Ph.D.
Reg. No. L0256

Fish & Richardson P.C.
601 Lexington Avenue
Floor 52
New York, NY 10022
Telephone: (212) 765-5070
Facsimile: (877) 769-7945